Association Business
AMERICAN POTATO JOURNAL SUBJECT AND AUTHOR INDEX VOLUME 73, 1996

Subject Index

Analysis
- Abbott's formula, 83
- Anderson's sample technique, 251
- Glycoalkaloid analysis, 23, 24
- Mann-Whitney U test, 216
- Spearman correlation, 83

Chemicals
- 1-cysteine-HCl, 3
- 1-heptanesulfonic acid, 24
- 6-benzylaminopurine, 3
- acetic acid, 23, 82
- ascorbic acid, 3
- $CaCl_2$, 399
- CIPC, 413
- $Ca(NO_3)_2$, 261, 399
- EDTA, 547
- Ethanol, 23, 201
- Formalin-acetic acid, 201
- Glycine-phosphate buffer, 103
- KOH, 48
- $LaCl_3$, 400
- Methanol, 82
- $MgCl_2$, 547
- Morphalino-sulfuric acid, 82
- NAH_2PO_4, 103
- NH_4NO_3, 413
- $(NH_4)_2SO_4$, 48
- Organic salts, 103
- Orthene, 103
- Parafin, 201
- Phosphoric acid, 24
- Potassium phosphate, 547
- Sodium hyprochorite, 103

Cineole-effect on disease development in stored tubers, 478

Coldstress of wild species, 397

Consultant services in Idaho, 461

Consultant use in Idaho, 463

Disease evaluations of St. John's, 97

Diseases
- Black scurf, 49
- Blackspot, 86, 96, 97, 114-122, 155, 158, 197
- Common scab, 97, 304, 308
- Corky ringspot, 89, 97
- Early blight, 97, 250
- Early dying, 250
- Hollow heart, 89
- Late blight, 97, 225-230
- Leafroll, 89, 97, 101-103
- Net necrosis, 89, 97
- Pressure bruise, 197-199
- Rhizoctonia, 45, 47, 49, 52, 54
- Ring rot, 97, 304, 308
- Verticillium wilt, 47, 89, 97, 304, 308

Equipment
- Absorption spectrophotometer AA20, 264, 400
- Accu Check III, 503
- Agtron model M30A, 547
- Agtron model M-35-D, 473
- Agtron model M400-A, 413
- Autofluorescence probe,201
- Bio-Rod protean apparatus, 327
- Biotron, 263
- C_{18} Sep-Pak, 23
- Corona discharge generator for ozone, 472
- Electrical conductivity meter YSI model 32, 265
- Fluorescent probe, 201
- Gilson respirometer, 67
- Hunter ozone meter AET-030, 472, 502
- Infared gas analyzer CID-PS300, 287
- Irrometer model KTC, 520
- Lambda-max 481 wave length detector, 23
- LI-3000 leaf area meter, 67, 264, 287
- LI-6200 infared gas analyzer, 66

LI-Cor porometer model 1600M, 200, 264, 288
Nylon membranes, 102
Photovolt reflectance meter, 522
Plot harvester, 337-340
Polystyrene microplates, 102
Portable rainshelter, 559-568
Radial-Pak column, 82
Sephadex G-25 column, 115
Sep-Paks, 82
Soil moisture sensor model 200X, 520
Sylvania SHP-T-400 sodium lamps, 3
Thermo barometer, 68
Torque generator, 339
U6K injector, 23
Warburg apparatus (Braun Melsunger AG), 288
YSI biochemical analyzer (model 2700 Select), 502
Zeiss ariokop microscope, 50, 201
Fertilization
Calcium nutrition, 261, 263
Cellular calcium, 399
Leaf calcium concentrations, 261, 263, 401-405
Nitrogen nutrition, 261, 268
N-fertilization effects on growth and yield, 45, 46, 49
N-fertilization replacement values, 58
Supplemental calcium fertilization, 397
Fungi and Fungi Problems
Alternaria solani, 45, 47, 49, 52, 54
Arbuscular mycorrhizae, 509
Colletotrichum coccodes, 251, 252
Erwinia caratovora, 89
Fusarium sambucinum, 89, 509-512
Glomus intraradix, 509, 510
Horizontal resistance to late blight PICHPAPA project, 226
Importance of common scab in seed potatoes, 275
Pathological stress factors, 52
Phytophthora infestans - RETONA-A new strategy for control of late blight, 225-227
Post harvest suppression of potato dry rot, 509-515
R. genes, 227, 228
R. *solani* stem and plant lesions related to rotation crops, 53
Vertical late blight resistance, 226
Verticillium dahliae, 47, 249-255
Vulpia ciliata spp. ambigua, 510
Fungicides
Asana, 49
Bavistin, 287
Captan, 287
Chlorothalonil, 511
Furadan, 287
Maneb, 511
Manex, 49
Metalaxyl, 511
Piretroide, 287
Growth Regulators
1,8-cineole, 472
Alpha(a-napthalineacetic acid)NAA, 5
Carvone, 470
Chlorpropham, 413, 469-471
Dimethyl-naphthalene, 470
Gibbberellic acid, 16
Maleichydrazide, 470
Piperitone, 470
Sprout inhibitors, 145, 469-488
Tetra chloro-nitrobenzine, 470
Glycoalkaloids
α-chaconine, 21-27, 79-83
α-solanine, 21-27, 79, 80, 82, 83
β-solamarine, 24, 26, 81
α-solasonine, 79, 81
α-solamargine, 81, 83
α-tomatine, 81, 83
Glykoalkaloid segregation, 21
glycosides, 31
Leaf and tuber glykoalkaloid content of selected *S. chacoense-tuberosum* F1 hybrids, 30
Leaf and tuber alkaloids in several potato clones, 25, 212, 303, 306
Leptenines, 24, 26, 27
Leptines, 21, 22, 24, 26, 27, 81, 82
Glucose monitoring, 501, 509
Glucose and sucrose ratings, 501, 502
Ground water contamination, 51
Heat stress mitigation, 67
Heat tolerance of potato clones, 63-65
Herbicides
Bentazon, 135, 136
Bromoxynil, 136
Diquat, 137, 413
Dual, 519

Metribuzin, 49, 135, 287
Petroleum oil concentrate, 136
Poast, 49
Prowl, 519
Telone II, 519
Tops, 513
X-77 spreader, 137
Insects
Aphis nasturtii, 124
Colorado potato beetle, 21, 22, 31, 211, 212
Empoasea fabae, 79-86
Golden nematode, 89
Leptinotarsa decemlineta, 22, 211, 212
Myzus persicae, 124, 125
Resistance to CPB, 212
Solanum species resistant to CPB, 211, 216, 220-222
Insecticides
Carbofuran, 511
Endosulfan, 49
Previcur, 287
Tecto, 287
Telone II, 519
Leaf carbon balance, 63, 65
Leaf disk gas exchange, 67-69
Leaf gas exchange characteristics, 63, 65
Leaf gas exchange measurements, 66, 67, 69
Location effect on seed production of Russet Burbank clones, 569-575
Media
Agar, 103
Agarose, 82
Jiffy mix, 510, 511
MS-Orthene media, 103
Murashige and Skoog, 3
Myconi mix, 510, 511
Perlite, 263
Potato-dextrose agar, 49
Wenzel and Uhrig media, 3
Membrane thermostability, 261, 263, 264, 267, 270
Minitubers, 509, 511
Mortality of leafhoppers fed on synthetic diet of glycoalkaloids, 79, 84-86
Net photosynthesis, 63-65, 72, 75
PAA Affairs
Abstracts of papers presented at the 80th annual meeting of the PAA, 341-395
Annual meetings of the PAA (1914-1998), 531
Book review, "Technology for Greenhouse Systems", 172, 336
Book review, "Modeling and Parameterization of the Soil-Plant-Atmosphere System: A Comparison of Potato Growth Models", 454
Catalog of potato germplasm, 454
Committees for 1996-97, 631
Constitution and by-laws of the PAA revised, 427
Current list of International potato meetings, 43
Final call for nominations for Honorary Life members 1996, 39
Final call for Graduate Student Awards competition, 37
First call for nominations for Honorary Life memberships 1997, 627
First call for Graduate Student Awards competition 1997, 625
First call for papers for the 81st Annual Meeting of the PAA, 623
Instructions to authors (revised), 173-181
Index to authors in vol. 73, APJ, 649
Index to subject matter in vol. 73, APJ, 639
Location of PAA meetings (1960-2005), 610
Minutes of the 80th Annual Business Meeting of the PAA, 586-591
Minutes of the 1996 Executive Committee Meetings of the PAA, 577-585
Minutes of the 1996-97 Executive Committee, 592-594
Notification of proposed change in by-laws of the PAA, 281
Obituaries
Robert H. Johansen, 635
Stephen L. Sinden, 637
Duane A. Smith, 453
Outstanding paper award for 1994, 142
Outstanding paper award for 1995, 499
PAA Life members (1947-1996), 537
PAA Life members (1996)
Donald Kichefski, 447
Miles Willard, 450
Past officers of the PAA, 533
Plant variety protection for potato in USA, 279

Potato bruising video (new), 456
Pre-registration for 80th Annual Meeting of the PAA in Idaho, 183
Program for the 80th Annual Meeting of the PAA in Idaho Falls, Idaho, 231
Proposed change in the PAA by-laws, 281
Publications available from the PAA, 122, 520
Registration form for the 80th Annual Meeting, 193-195
Reports of 1996 Committees
Archivist, 579, 605
Business Editor, 578, 596
Editorial Office, 579, 603
Executive, 577, 592
Finance, 583, 593, 594, 595
Graduate Student Awards, 580, 604
Honorary Life Membership, 580
Journal Review Committee, 581
Membership Secretary, 579, 602
Nomination Committee, 580
Outstanding Paper Award Committee, 580
Site Selection, 585, 609
Treasurer's Report and Financial Statement, 578, 598, 608
Reports from Sections
Breeding and Genetics, 615
Certification, 613
Entomology, 622
Extension, 611
Pathology, 617
Physiology, 618
Production and Management, 619
Utilization and Marketing, 620
Results of Journal Review Committee Survey of the PAA Membership, 435-446
Selection procedures for Honorary Life memberships, 41
Sprout inhibitors patents, 145
Third World Potato Congress, 457
80th Annual Meeting announcement for Idaho Falls, Idaho, 42
81st Annual Meeting announcement for Charlottetown, Prince Edward Island, Canada, 495, 541
Potato breeding
agronomic performance of germplasm resistant to verticillium wilt, 249, 251
allelic stability, 325
androgenesis, 2, 8
androgenic capacity of clones produced in anther culture, 5
anther culture, 1-3
autotetraploid potato clones, 15
chromatids, 13, 17
dihaploid cultivars, 2, 3, 8
DNA sequences, 325
double reduction, 18
foliar alkaloids, 212
freezing stress tolerance of wild potato germplasm, 397-410
frost scores for wild potato species, 400-405
genetic markers, 326
germplasm enhancement, 211
germplasm resistant to verticillium wilt, 249
glandular trichomes, 212
influence of incubation temperature on embryo production, 6, 7, 10
intelli genetics PC/GENE, 326
interspecific hybrids, 249
maximum likelihood estimation procedure, 16
medelion inheritance, 326
micro satellites, 320
mutation breeding for quality, 155, 163, 164
MV1-MV6 tubers from gamma ray irradiation, 155, 158, 159, 161, 168
nucleotides, 325, 326
oligonucleotides, 326
PCR (polymerase reaction), 327
plant resistance to potato leafhopper, 80
polymorphic DNA (RAPD), 326
polymorphisms (RFLP's), 326
potato genebank (NRSP-6), 213, 326, 327
proteinase inhibitor, 325
PVY immunity allele, 15
R-genes, 226-228
simple sequence repeats (SSR5), 325
SSR characterization, 327, 328
starch synthesis gene, 325, 328
tetraploid clones and cultivars, 1, 3, 326, 327
virus resistance breeding strategy, 14
wilt severity and stem colonization of verticillium wilt resistant parents, 257

yellow fleshed cultivars, 301-304
Plant species
alfalfa, 45-47
barley, 326
canola, 326
chenopodium quinoa, 125
chickpea, 326
clovers, 46
corn, 46
grapes, 326
hairy vetch, 45-47
lima bean, 81
nicotina debneyi, 125
nicotina tobacum, 309, 312
oats, 45-47
pepper, 326
rice, 326
sesbania cannabina, 46
sorghum, 46
tomato, 326
white lupin, 45-47
Potato cultivars (new)
OAC Ruby Gold, 301-304
OAC Temagami, 305-308
Rose Gold, 301, 302, 305, 319
St. John's, 89-98
Potato cultivars (old)
Abnaki, 304, 306, 308
Agria, 1, 5
Allegany, 93-96, 319
Alpha, 227, 285-291
Arran Pilot, 569
Atlantic, 93-96, 103, 113, 114, 117-119, 227, 311, 319, 510, 511, 545, 547, 549
Bellisle, 319
Belrus, 312
Bintje, 312
Butte, 252
Calgary, 1, 3, 5, 6
Caribe, 312, 339
Century Russet, 249, 253
Chaleur, 319
Chieftan, 103, 301, 303, 306, 312
Conestoga, 319
Desiree, 63, 65, 69-74
Escort, 1, 6
Gemchip, 411-415, 419, 422
Green Mountain, 103
Helios, 1, 6
Herta, 285-291
Idole, 1, 6
Igor, 317
Jemseg, 103, 312, 319
Kainuum, 1, 6
Kardal, 1, 6
Katahdin, 89, 91, 92-95
Kennebec, 93-96, 103, 113, 114, 117-119, 227, 311, 319
Kranz, 312
Lemhi Russet, 113, 114, 117-119, 252
Matilda, 1, 6
Merrimack, 91
Mix, 1, 2
Monona, 91, 200, 545, 547, 549
Musta, 1, 6
Nicola, 1, 3, 6
Niska, 501-503
Norchief, 302, 306
Norchip, 311, 317, 411-415, 419, 422, 501-503, 545, 547, 549
Norland, 103, 123-131
Norwis, 45, 47
Novachip, 319, 545, 547, 549
Onoway, 545-549
Pentland Crown, 2
Petra, 1, 3, 5, 6
Pito, 1, 3
Ranger Russet, 113, 114, 117-119, 251-253, 312, 317
Reddale, 249, 253
Red Gold, 319
Red LaSoda, 215
Red Pontiac, 103, 311
Redsen, 319
Rhinered, 302, 306
Russet Burbank, 47, 63, 65, 68-74, 103, 113, 114, 117-119, 123-131, 135-138, 155-157, 227, 249-253, 261, 263, 312, 317, 319, 325, 327, 334, 411-413, 415, 419, 422, 469, 471, 502, 503, 517-519, 523, 569-571
Russet Norkotah, 251-253, 317
Rustica, 1, 6
Saginaw Gold, 545, 547, 549
Sebago, 95
Shepody, 103, 317
Snowden, 312, 545, 547, 549
Sterling, 1, 6
Superior, 93-96, 103, 302, 306, 312, 319
Torridon, 1, 6

Ute, 1, 6
Van Gogh, 1, 3, 5, 6
Vento, 1, 6
Verbeca, 1, 6
White Lady, 1, 3, 5, 6
Yankee Chipper, 103
Yukon Gold, 312, 319
Potato cultivars (numbered seedlings)
1376-6, 91
4195-6, 91
8380-1, 22, 25, 82
86110, 5
A66107-51, 249-254
A68113-4, 249-254
A7805-8, 251, 253
A81473-2, 251-253
A88646-12, 253
A88646-16, 253
A88646-18, 253
A88646-28, 253
AC25953, 91
AF828-5 (St. John's), 90-98
B36-92, 91
B61-3, 91
B96-56, 91, 132
B355-24, 91
B595-76, 91
B607-56, 91
B2919-1, 91
B3692-4, 28, 29
B4159-8, 91
B5036-40, 91
B5141-6 (Lenape), 91
B5301-7, 91
B6503-5, 91
B6558-2, 28
B6761-11, 28
B8713-24, 28, 29
B9144-5, 24, 27, 28
B9335-3, 28
B9922-11, 103
BR6317-21, 90, 91
DTO-28, 63, 65, 70-74
G6324-6R, 302, 306
G6521-4RY, 302
G7010-19RY (Rose Gold), 30, 302, 305
JO 0982, 6
JO 1432, 5, 6
K219-5, 91
KE48, 6
ND4524-73, 302, 306
ND860-2, 545, 547, 549
PI209412, 214
PI230511, 211
PI458310, 81
PI473227, 211, 214, 215
PI47331, 81
PI473331, 211
PI473336, 211, 214
PI473494, 211
RBM13, 155
RBM155, 155
RBM161, 155
RBM166, 155
RBM366, 155
W729R (Rhinered), 301, 302
W639, 306
WIS-AG231, 302, 306
WRF343, 211, 215
Potato quality
amino acids, 484
aminopeptidase, 113, 118, 119
amylase, 545, 547, 551
blackspot susceptibility measurement, 113-117
chemical maturity of tubers, 501-507
chemical sprout inhibition effects on sugars, 484
chip color, 155, 158, 160, 161, 411-426, 545, 547, 550
chlorismate mutase, 113, 114, 116
chlorogenic acid, 114
comparative performance of OAC Ruby Gold, OAC Temagami and Chieftan, 303, 307
culinary characteristics of St. John's, 90-93
cyanide resistant respiration, 483, 485, 486
cytochrome mediated respiration, 486
effects of cineole on fry color, 476, 479
effects of ozone on fry color, 476, 479
endopeptase activity, 118
enzyme assays, 115, 116
french fry color, 517-519, 569, 571
fructose sugars, 415, 416, 475, 476
gelatinization temperature, 545
glucose, 415-418, 475, 476
glucose monitoring, 501, 507
glucose and sucrose ratings, 501, 502

gluconeogenesis, 405
glycoalysis, 485
improved internal quality, 155, 157
improved tuber appearance, 155, 157
kjeldahl nitrogen, 414
Kreb's cycle substrates, 486
low temperature sweetening, 483, 545, 549
Maillard browning reaction, 412, 422, 424, 484
main types of sugar accumulation, 484
melamin type pigments, 113, 114, 118, 119
mitochondrial respiration, 485
mutase activity, 113, 117
non-enzymatic browning, 484
nonprotein nitrogen, 424
phenylalanine, 114
potato chip appearance of three cultivars, 419, 422, 424
proteinaceous inhibitor, 490
proteinase, 113
potato invertase rate in production of sugars, 490
reducing sugars, 483, 484, 487, 517-524
reducing sugar accumulation, 483, 485, 545
senescent sweetening, 412, 415, 424
soluble protein measurement, 113-117
specific gravities of selections resistant to verticillium wilt, 254, 256
specific gravities of OAC Ruby Gold, OCS Temagami and Chieftan, 303, 307
specific gravities of St. John's and standard varieties, 94
starch crystalinity, 545, 548, 551, 554
starch granule size distribution, 545, 548, 549, 551, 553, 555-557
sugar conversions, 412
"sugar-ends", 517, 518
starch synthesis, 485
tuber appearance ratings of St. John's and standard varieties, 95
tuber malformations, 156
tuber size distribution of St. John's and standard varieties, 93
tuber stem-end french fry colors, 517-519
tuber stem-end reducing sugars, 523, 528
tyrosine, 113, 114

Potato species (*Solanum*)
acaule, 401
andigena, 13, 14, 18
berthaultii, 81-83, 211, 214, 403
boliviense, 401, 405
brevidens, 401
bukasovii, 211-215, 401, 405
bulbocastanum, 403, 405
canasense, 401
cardiophyllum, 403
chacoense, 21, 22, 81, 82, 211, 214, 254, 403
commersonii, 401, 405
demissum, 225, 311, 401
dulcamara, 24
fendleri, 403, 405
megistacrolobum, 401
microdontum, 403
neocardenasii, 83
phureja, 2, 10, 254, 403, 405
pinnatisectum, 211-215, 403
polyadenium, 403
raphanifolium, 254
scantae-rosae, 401
stenotomum, 254
toralapanum, 401
tuberosum, 1, 2, 15, 21, 22, 45, 63, 79-81, 113, 114, 124, 135, 155, 285, 309, 325, 326, 333, 398, 501, 509, 518
vernei, 402, 405
verrucosum, 403

Production problems
Acceptable seedpiece spacing index, 168, 169
Histochemical probing of pressure bruise areas, 204, 208
Measuring seedpiece spacing uniformity, 167, 169
Microscopical analysis of pressure bruise areas, 202-204
Photosynthesis rate under contrasting temperature regimes, 285, 287, 292
Physiological responses to tuber pressure bruising, 197-218
Productivity of potatoes grown at different temperatures, 63
Productivity versus leaf gas exchange, 63
Porometric vapor conductance values, 200
Porometric vapor conductance of pressure bruised areas and non-pressure bruised area, 201, 202

Tuber water vapor loss, 197
Yield reduction for missing plants, 168, 170
Rapid test for chemical maturity of tubers, 501, 508
Relationship of chip color with structural parameter of starch, 545-558
Respiration-photosynthesis ratio, 63-65
Replacement value for N. fertilizers, 58
Rotation effects on growth and yield, 45, 47, 49, 58
Rotation and N. fertilization effects on disease incidence, 45, 47, 58
Soil water potential, 521-523
Sources of information for potato growers, 465
Sprout inhibition, 469, 470
Effects of cineole on tuber sprouting, 469-482
Natural sprout inhibitors, 470
Non-chemical methods of sprout inhibition, 470
Ozone for sprout inhibition, 470, 471
Stomatal resistance, 285, 288, 294
Storage qualities of St. John's, 96
Survey of market for consultants in Idaho, 461-468
Temperature effect on plant growth, 68, 69
Temperature regimes, 285-295
Transpiration rates of potato clones, 293
Transitory water stress effects on stem-end reducing sugars and fry color, 517-530
Tuber bulking, 46
Tubers per plant, 51, 52
Types of consultants, 461
Viruses
Capsicum frutiscens, 309, 312
Chenopodium amaranticolor, 309, 312, 313, 318, 321
Chenopodium quinoa, 317, 318, 321
Detection and quantification of PSTVd, 108, 109
Detection of viruses from leaf discs, 104, 105
Detection of viruses in single leaf discs from tissue culture, 105-107
DIBA spots, 101, 102
Duplex PVY immune clones, 15, 16, 18
ELISA, 101-112, 123, 126, 127, 309, 311-313
Host range of symtomology and serology of isolates of PVY, 309, 312
Isolates of tobacco venial necrosis, 310
Isolates of Tu619 and Tu660 of potato virus PVY^{NTN}, 317-319
Leaf discs for virus identification, 101-112
Mechanical spread of PVS, 123, 124, 126
Monoclonal antibody MBb, 310
Monoclonal antibody Mabs, 310
NASH, 101, 102
Necrotic ringspot disease PTNRD, 317-319
Physalis angulato, 309, 312
Physalis floridana, 309, 312, 313
Plant symptoms and tuber sensitivity ratings to PTNRD cultivars, 320
Polyclonal antibodies, 103
PVY immunity, 13-16
PVY immune genotypes, 13, 15, 17, 18
PVY isolates, 312, 313
PVY I-136, 309, 312
PVY I-L56, 309, 312
PVY specific Mabs, 309, 312, 313
Quadruplex immune progenitors, 14-16, 18
Reactions of virus PVY isolates on selected indicator species, 311
Reinfection with PVS, 123, 125
R-PAGE, 103
Response of cultivars to North American isolates of PVY^{PTN}, 317-323
Translocation of virus S, 123, 125, 127
Triplex immune progenitors, 13, 15, 16, 18
Triplex virus identification, 13, 16, 17
Virus concentration in regenerated tissue culture plantlets, 106, 109
Virus detection, 102-112
Virus PVY immune progenitors, 13
Virus and viroid detection, 103
Virus A (PVA), 101-112
Viroids (PSTVd), 101-113
Virus PLRV, 101-103
Virus M (PVM), 101, 103
Virus S (PVS), 101, 103, 123, 124
Virus Y^N (PVY^N), 101, 103, 309-311, 313
Virus Y^o (PVY^o), 101, 103, 309-311, 318
Virus X (PVY), 101, 103
Weeds
Hairy nightshade (*solanum sarrachides*), 135, 136, 139

Kochia (Kochia scoparea), 135, 136
Lambsquarters (*Chenopodium album*), 135, 136, 139
Redroot pigweed (*amaranthus retroflexus*), 135, 136, 139
Russian thistle (*Salsala iberica*), 135, 136
Weed control, 135
Pre-emergence weed control, 135, 138, 139
Tolerance to herbicides, 135, 140
Yields
Comparative yields of St. John's and standard varieties, 92
Yields for mutants of Russet Burbank clones, 161
Yields of OAC Ruby Gold, 303
Yields of OAC Temagami, 307
Yield of potato clones grown under contrasting temperature regimes, 297
Yields of selections from crosses highly resistant to verticillium wilt, 255, 256

Author Index
Volume 73

ABELLO J., F. *see* LOZOYA-SALDANA, H.
ADAM, L.R. *see* PRITCHARD, M.K.
AGBLOR, A. and M.G. SCANLON. Effects of processing conditions on the mechanical properties of french fries, 341 (abst.).
ALI-KHAN, S.T., G.R. JOHNSTON, R. COFFIN, V. CURRIE, J. WILSON, A. McKEOWN, and W. LANGENBERG. OAC Ruby Gold: A new red-skinned yellow fleshed table potato cultivar, 301.
ALI-KHAN, S.T., G.R. JOHNSTON, R. COFFIN, V. CURRIE, J. WILSON, A. McKEOWN, and W. LANGENBERG. OAC Temagami: A new red-skinned white fleshed table potato cultivar, 305.
ALI-KHAN, S.T. *see* MOZAFARI, J.
ALREHIAYANI, S. *see* HAFEZ, S.L.
ALVAREZ-LUNA, E. *see* NIEDERHAUSER, J.S.
ANDERSON, J. *see* RENIA, H.
ARBUCKLE, N. *see* RENIA, H.
BALBYSHEV, N.F. and J.H. LORENZEN. Breeding for resistance to the Colorado potato beetle, 341 (abst.).
BAMBERG, J.B. *see* CHEN, Y-K
BAMBERG, J. *see* ERREBHI, M.
BAMBERG, J.B., C.A. LONGTINE, and E.B. RADCLIFFE. Fine screening *Solanum* (potato) germplasm accessions for resistance to Colorado potato beetle, 211.
BAMBERG, J., A. SALAS, S. VEGA, R. HOEKSTRA, and Z. HUAMAN. Notes on wild potato populations in Arizona and New Mexico, 342 (abst.).
BAMBERG, J. *see* del RIO, A.
BAMBERG, J.B. *see* VEGA-SEMORILE, S.E.
BAMBERG, J.B. *see* VEGA, S.E.
BANTTARI, E.E. *see* FRANC, G.D.
BARRETT, K.B., P. NOLTE, W.B. JONES, and L.L. NOLTE. Antibacterial properties of a grain-derived product, 342 (abst.).
BEATTIE, B.M. *see* McPHEE, J.E.
BERNAL-LUGO, I. *see* SARQUIS, J.I.
BERTRAM, M.C. and OJALA, J. The detection of common defects and specific gravity of potato tubers using nondestructive evaluation (NDE) methods, 343 (abst.).
BINNING, L.K. *see* KELLING, K.A.
BISHOP, B.A. *see* GRAFIUS, E.J.
BOHL, W.H., S.L. LOVE, and A. THOMPSON-JOHNS. Effects of removing the seed piece at three growth stages on yield and agronomic characteristics of Russet Burbank potatoes, 343 (abst.).
BOITEAU, G. *see* SINGH, R.P.
BOROVKOV, A., S. RUUD, and G. SECOR. Organization of potato UDP-glucose pyrophosphorylase gene promoter, 344 (abst.).
BOUCHER, A. *see* SINGH, R.P.
BOURETT, T.M. *see* HOWARD, R.J.
BOWEN, B., R. WOLKOWSKI, and G. HANSEN. Effect of fresh and composted paper mill sludge on potato crop, 344 (abst.).

BOWERS, B., K. SHETTY, G. KLEINKOPF, D. CORSINI, and J. FULLER. The cause and control of stem-end discoloration (SED) in Russet Burbank potatoes under Idaho potato production practices, 344 (abst.).
BOYDSTON, R.A. Volunteer potato control in field corn, 345 (abst.).
BOYDSTON, R.A. and S.F. VAUGHN. Evaluation of alternative weed management systems in potatoes, 345 (abst.).
BOYDSTON, R.A. *see* SCHNEIDER, S.M.
BOYLSTON, T.D. *see* POWERS, J.R.
BRADBURY, B. *see* PORTER, G.
BROWN, C.R., M. McNABNAY, and B.B. DEAN. Enzymatic darkening of tuber flesh in *Solanum hjertingii* and selected cultivated potatoes, 346 (abst.).
BURKHEAD, K.D., P.J. SLININGER, and D.A. SCHISLER. Antifungal compounds produced by *Enterobacter cloacae* NRRL B-21050 as potential mechanisms of control of fusarium dry rot, 347 (abst.).
BURRELL, M.M. *see* SOWOKINOS, J.R.
BUSHWAY, R.J., K. LARKIN, B. PERKINS, and Q. WANG. Determination of thiabendazole in potatoes by ELISA, 347 (abst.).
BUSHWAY, A.A. *see* WORK, R.W.
BUSHWAY, A.A. *see* WORK, T.M.
CAMPBELL, W.L. Disease-tested cultivar maintenance, 347 (abst.).
CANTELO, W.W. *see* SANFORD, L.L.
CARRAS, M.M. *see* TOOLEY, P.W.
CASADA, M.E. *see* HUA, Z.
CHANI, E. and R.E. VEILLEUX. Factors influencing anther culture of inter-specific diploid potato clones, 347 (abst.).
CHEN, Y-K, J.P. PALTA, J.B. BAMBERG, J.P. HELGESON, and G.T. HABERLACH. Expression of freezing tolerance in somatic hybrids between hardy wild and cultivated potato species, 348 (abst.).
CHEN, Y-K, J.B. BAMBERG, and J.P. PALTA. Expression of freezing tolerance in interspecific F1 of potatoes, 348 (abst.).
CLAPHAM, W.M. *see* HONEYCUTT, C.W.
COFFIN, R. *see* ALI-KHAN, S.T.
COFFIN, R. *see* DANIELS-LAKE, B.J.
COFFIN, R. *see* DANIELS-LAKE, B.J.
COLEMAN, S. *see* SINGH, R.P.
COLEMAN, W.K., J. LeBLANC, and T. MORISHITA. A rapid test for chemical maturity monitoring of tubers, 501.
COLTMAN, R.R. and T.L. GERMAN. Potato crop productivity as a function of seed generation, 349 (abst.).
CONNELL, T.R. *see* KELLING, K.A.
CONNORS, E. *see* PETERS, R.D.
CORKREY, R. *see* McPHEE, J.E.
CORSINI, D. and J.J. PAVEK. Agronomic performance of potato germplasm selected for high resistance to verticillium wilt, 249.
CORSINI, D., J. STARK, and M. THORNTON. Blackspot bruise potential of Idaho potato fields, 349 (abst.).
CORSINI, D. *see* BOWERS, B.
CORSINI, D. *see* INGLIS, D.
CUMMINGS, T. *see* GEARY, B.
CURRIE, V. *see* ALI-KHAN, S.T.

CURWEN, D. *see* KELLING, K.A.
DANIELS-LAKE, B.J., R.K. PRANGE, W. KALT, C.L. LIEW, J. WALSH, P. DEAN, and R. COFFIN. The effects of ozone and 1, 8-cineole on sprouting, fry color and sugars of stored Russet Burbank potatoes, 350 (abst.).
DANIELS-LAKE, B.J., R.K. PRANGE, W. KALT, C.L. LIEW, J. WALSH, P. DEAN, and R. COFFIN. The effects of ozone and 1,8-cineole on sprouting, fry color and sugars of stored Russet Burbank potatoes, 469.
DAVIDSON, R.D. *see* FRANC, G.D.
DAVIS, A.A. *see* REEVES, A.F.
DAVIS, J.R., O.C. HUISMAN, L.H. SORENSEN, and A.T. SCHNEIDER. Quantitative field surveys of *Verticillium dahliae* infection on potato roots for measuring the relationship of verticillium wilt to potato yield and quality, 350 (abst.).
DEAHL, K.L. *see* SANFORD, L.L.
DEAHL, K.L., S.P. DeMUTH, and D.L. LAMBERT. Aggressiveness, pathogenicity and genetic diversity in populations of recent migrant strains of *phytophthora infestans*, 351 (abst.).
DEAN, B.B. and E. SKIZECZKOWSKA. Factors that cause necrosis in potato tubers, 351 (abst.).
DEAN, B.B. *see* BROWN, C.R.
DEAN, B.B. *see* SABBA, R.P.
DEAN, P. *see* DANIELS-LAKE, B.J.
DEAN, B.B. *see* McNABNAY, M.P.
DEAN, P. *see* DANIELS-LAKE, B.J.
DeHAAN, T-L, *see* SINGH, M.
DeJONG, R.W. *see* FENNELL, J.F.M.
del RIO, A., J. BAMBERG, Z. HUAMAN, R. HOEKSTRA, A. SALAS, and S. VEGA. Assessing changes in the genetic diversity in potato genebanks, 381 (abst.).
DeMUTH, S.P. *see* DEAHL, K.L.
DENT, B. *see* RENIA, H.
DIAMOND, J.F. *see* SINGH, M.
DOMAK, J.M. *see* SANFORD, L.L.
DOUCHES, D.S., A. LISWIDOWATI, W. PETT HADI-PERMADI, P. HUDY, A. WESTEDT, and E. GRAFIUS. Progress in development and evaluation of BT-transgenic potatoes with resistance to potato tuber moth (*Phthorminaea operculella*), 352 (abst.).
DOUCHES, D. *see* HUAMAN, Z.
DOUCHES, D.S. *see* SCHNEIDER, K.
DUPLESSIS, P., A. MARANGONI, and R. YADA. Monitoring and predicting sugar content in stored potatoes and its application on process quality, 352 (abst.).
DUPLESSIS, P.M., A.G. MARANGONI, and R. YADA. A mechanism for low temperature induced sugar accumulation in stored potato tubers: The potential role of the alternative pathway and invertase, 483.
DWELLE, R.B. *see* THORNTON, M.K.
DWELLE, R.B. *see* HERRMAN, T.J.
EBERLEIN, C.V., M.J. GUTTIERI, and F.E. FLETCHER. Post-emergence directed application of bentazon + metribuzin for broadleaf weed control in Russet Burbank potatoes, 135.
EBERLEIN, C.V., B.A. KING, M.J. GUTTIERI, and T.N. PRICE. Variable rate herbigation with a prototype automated irrigation control system, 352 (abst.).
EBERLEIN, C.V., M.J. GUTTIERI, and M.J. MORRA. Integrating winter wheat and winter rape cover crops with herbicides for weed and erosion control in potatoes, 353 (abst.).
ELDREDGE, E.P., Z.A. HOLMES, A.R. MOSLEY, C.C. SHOCK, and T.D. STIEBER. Effects of transitory water stress on potato tuber stem-end reducing sugar and fry color, 517.

ERREBHI, M., C. ROSEN, F. LAUER, M. MARTIN, and J. BAMBERG. Evaluation of tuber-bearing *Solanum* species for nitrogen use efficiency and biomass production, 353 (abst.).
EVANS, R.G. *see* SCHNEIDER, S.M.
FARRIES, B.C., D.R. LYNCH, and N. FOROUD. A portable rainshelter to facilitate moisture stress studies in potatoes, 559.
FELDMAN, J. *see* STEWART, J.
FENGGAO, D. and J. JIANG. Physical mapping of the ribosomal RNA genes in potato, 354 (abst.).
FENNELL, J.F.M. *see* McPHEE, J.E.
FENNELL, J.F.M. and R.W. DeJONG. Effect of seed production location on the performance of Russet Burbank clones in southern Australia, 569.
FERRARI, M.A. *see* HOWARD, R.J.
FLETCHER, F.E. *see* EBERLEIN, C.V.
FOLTZ, J.C. *see* GUENTHNER, J.F.
FOROUD, N. *see* FARRIES, B.C.
FORSTER, R.L. *see* NOLTE, P.
FRANC, G.D. and E.E. BANTTARI. Translocation and mechanical spread of a Minnesota isolate of potato virus S in potatoes, 123.
FRANC, G.D., R.D. DAVIDSON, and W.L. STUMP. *Clavibacter Michiganensis* Subsp. *Sepedonicus* transmission via tissue culture-derived plantlets and microtubers, 354 (abst.).
FRANKLIN, P.U. and C.F. QUIROS. Comparative mapping of the A and E genomes in *Solanum*, 355 (abst.).
FRAZIER, M.J., G.E. KLEINKOPF, and K.K. SHETTY. The effect of curing conditions and free moisture during storage on the severity of the silver scurf disease of potatoes, 355 (abst.).
FRIEDMAN, M., G.M. McDONALD, and L.H. STANKER. Correlation of HPLC and immunoassays for glycoalkaloids in potato tubers and leaves, 356 (abst.).
FULLER, J. *see* BOWERS, B.
GARCIA DE LA R., G. *see* LOZOYA-SALDANA, H.
GEARY, B., D.A. JOHNSON, T. CUMMINGS, and J.S. MILLER. Redistribution of air applied fungicides in potato canopies, 356 (abst.).
GERMAN, T.L. *see* COLTMAN, R.R.
GLYNN, M.T. *see* LULAI, E.C.
GOMEZ, R. *see* HUAMAN, Z.
GONZALEZ, H. *see* SARQUIS, J.I.
GOTH, R.W. and J. KEANE. Use of detached leaf assay for evaluating late blight reactions of potato and tomato, 357 (abst.).
GOTH, R.W. *see* HAYNES, K.G.
GOTH, R.W. *see* WEINGARTNER, D.P.
GRAFIUS, E.J. and B.A. BISHOP. Insecticide resistance in Colorado potato beetles in Michigan: A history lesson, 357 (abst.).
GRAFIUS, E. *see* DOUCHES, D.S.
GROZA, H. Measurements of phenotypic stability of potato cultivars by using parametric and nonparametric coefficients, 358 (abst.).
GUENTHNER, J. *see* NEDROW, B.
GUENTHNER, J.F. *see* TOPOLEWSKI, M.J.
GUENTHNER, J.F. *see* ZHANG, Y.
GUENTHNER, J.F., D.K. LANCOS, J.C. FOLTZ, L.D. MAKUS, and W.K. SANCHEZ. The market for consultants in the Idaho potato industry, 461.
GUNDERSON, B. *see* INGLIS, D.

GUNTER, C.C., M.D. KLEINHENZ, and J.P. PALTA. Increasing seed piece quality with calcium, 358 (abst.).
GUSTINE, D.L. *see* LANGILLE, A.R.
GUTTIERI, M.J. *see* EBERLEIN, C.V.
HABERLACH, G.T. *see* CHEN, Y-K
HABERLACH, G.T. *see* HELGESON, J.P.
HAFEZ, S.L., M. THORNTON, S. ALREHIAYANI, and G.C. WEISER. Green manure and N fertilizer effects on potato tuber yield nematode infested soil, 359 (abst.).
HAFEZ, S. *see* SULOIMAN, A-R
HALL, R. *see* PETERS, R.D.
HAMERNIK, A.J. and R.E. HANNEMAN, JR. Incorporating wild potato species for the development of cold chipping (2 C) diploids, 359 (abst.).
HAMLEN, R.A. and R.J. POWER. Natural variation in sensitivity of *Phytophthora infestans* to Curzate®, 360 (abst.).
HAMLEN, R.A. *see* HOWARD, R.J.
HAMMERSCHMIDT, R. *see* NIEMIRA, B.A.
HAN, S. *see* HESS, J.R.
HAN, S. *see* SCHNEIDER, S.M.
HANNEMAN, JR., R.E. Evaluation of wild species for new sources germplasm that chip directly from cold storage, 360 (abst.).
HANNEMAN, JR., R.E. Summary of the National Cooperative Enhancement Project questionnaire, 360 (abst.).
HANNEMAN, JR., R.E. *see* HAMERNIK, A.J.
HANNEMAN, JR., R.E. *see* JACKSON, S.A.
HANNEMAN, JR., R.E. *see* RAMON, M.
HANSEN, G. *see* BOWEN, B.
HAYNES, K.G., D.P. WEINGARTNER, J. MELDRUM, and R.W. GOTH. Additive gene effects are important in the bacterial wilt resistance of *Solanum tuberosum*, 361 (abst.).
HAYNES, K.G., W.J.E. POTTS, and R.W. GOTH. Choice of response variable for evaluating potato tuber soft rot resistance, 361 (abst.).
HAYNES, K.G. *see* WEINGARTNER, D.P.
HEIDER, D.J. *see* KELLING, K.A.
HELGESON, J.P., G.T. HABERLACH, J.M. McGRATH, R.V. JAMES, and W.R. STEVENSON. Multiple site tests of resistance to late blight of *Solanum bulbocastanum*—potato somatic hybrids and their progeny, 362 (abst.).
HELGESON, J.P. *see* CHEN, Y-K
HENNINGER, M.R. *see* LOVE, S.L.
HENRY, R. *see* SANDERSON, J.B.
HENSEL, D.R. *see* REEVES, A.F.
HERO, D.E. *see* KELLING, K.A.
HERRERA, M.R. *see* HUAMAN, Z.
HERRMAN, T.J., S.L. LOVE, B. SHAFII, and R.B. DWELLE. Chipping performance of three processing potato cultivars during long-term storage at two temperature regimes, 411.
HESS, J.R., R.L. HOSKINSON, W.B. JONES, S. SCHNEIDER, and S. HAN. Site-specific assessment of potato crop production, 362 (abst.).
HOEKSTRA, R. *see* BAMBERG, J.
HOEKSTRA, R. *see* del RIO, A.
HOGG, T.J. *see* WAHAB, M.N.J.
HOLM, D.G. Russet Norkotah clonal selection studies: A three year summary, 363 (abst.).
HOLMES, Z.A. *see* ELDREDGE, E.P.

HONEYCUTT, C.W., W.M. CLAPHAM, and S.S. LEACH. Crop rotation and N fertilization effects on growth, yield, and disease incidence in potato, 45.
HOSKINSON, R.L. *see* HESS, J.R.
HOWARD, R.J., M.A. FERRARI, T.M. BOURETT, M.D. STIDHAM, C. SHILLINGFORD, R.J. POWER, and R.A. HAMLEN. Biology of Curzate, action against *Phytophthora infestans* infection of tomato, 363 (abst.).
HU, W. *see* WORK, R.W.
HUA, Z., K.K. SHETTY, M.E. CASADA, and M.K. THORNTON. Assessing current problems in transportation of table stock potatoes in refrigerated rail, 364 (abst.).
HUAMAN, Z., F. RODRIGUEZ, M.R. HERRERA, D. DOUCHES, and R. GOMEZ. Genetic diversity studies on native potatoes of Latin America, 364 (abst.).
HUAMAN, Z. *see* BAMBERG, J.
HUAMAN, Z. *see* del RIO, A.
HUDY, P. *see* DOUCHES, D.S.
HUESTIS, G.M. *see* YILMA, S.
HUISMAN, O.C. *see* DAVIS, J.R.
INGLIS, D., B. GUNDERSON, D. CORSINI, J. PAVEK, S. LOVE, A. MOSELY, and R. THORNTON. Evaluation of potato germplasm from the Pacific Northwest for resistance to late blight, 364 (abst.).
IVANY, J.A. Weed control in potatoes with rimsulfuron, 365 (abst.).
JACKSON, S.A. and R.E. HANNEMAN, JR. An assessment of crossability between cultivated potato and its wild relatives, 365 (abst.).
JAMES, R.V. *see* HELGESON, J.P.
JENKINS, S. *see* PLATT, H.W.
JIANG, J. *see* FENGGAO, D.
JOHNSON, D.A. *see* GEARY, B.
JOHNSON, D. *see* ROWE, R.C.
JOHNSTON, W. and H. PLATT. Pathogenicity of *Rhizoctonia solani* recovered from potential rotation crops for potatoes, 366 (abst.).
JOHNSTON, G.R. *see* ALI-KHAN, S.T.
JONES, W.B., L.L. NOLTE, and J. OJALA. Use of the instrumented sphere in assessing potential bruising areas in potato packing sheds, 366 (abst.).
JONES, W.B. *see* BARRETT, K.B.
JONES, W.B. *see* HESS, J.R.
KALT, W. *see* DANIELS-LAKE, B.J.
KALT, W. *see* DANIELS-LAKE, B.J.
KAWCHUK, L.M., D.R. LYNCH, J. THOMAS, B. PENNER, D. SILLITO, and F. KULCSAR. Characterization of Solanum tuberosum simple sequence repeats and application to potato cultivar identification, 325.
KAWCHUK, L.M. and D.R. LYNCH. Identification of potato varieties using site-specific amplified microsatellite DNA products, 367 (abst.).
KAZUO, P.T. *see* VALKONEN, J.
KEANE, J. *see* GOTH, R.W.
KELLING, K.A., D.E. HERO, T.R. CONNELL, D.J. HEIDER, L.K. BINNING, D. CURWEN, W.R. STEVENSON, and J.A. WYMAN. Influence of crop rotation on potato nitrogen needs, 367 (abst.).
KING, B.A. *see* EBERLEIN, C.V.
KLEINHENZ, M.D. *see* GUNTER, C.C.
KLEINHENZ, M.D. *see* TAWFIK, A.A.

KLEINHENZ, M.D. and J.P. PALTA. Combinations of growing temperature and rhizospheric calcium level differentially affect biomass accumulation and partioning, 367 (abst.).
KLEINKOPF, G. *see* BOWERS, B.
KLEINKOPF, G.E. *see* FRAZIER, M.J.
KOBAYASHI, R.S. *see* SANFORD, L.L.
KULCSAR, F. *see* KAWCHUK, L.M.
KURZ, J. *see* SINGH, R.P.
LAMBERT, D.L. *see* DEAHL, K.L.
LAN, Y. *see* LANGILLE, A.R.
LANCOS, D.K. *see* GUENTHNER, J.F.
LANGE, F.D., W.W. LANGE, and D.R. LYNCH. Niska - Market introduction into Europe, 368 (abst.).
LANGE, W.W. *see* LANGE, F.D.
LANGENBERG, W. *see* ALI-KHAN, S.T.
LANGILLE, A.R., Y. LAN, and D.L. GUSTINE. Use of protoplast regeneration techniques in identifying potato clones with elevated levels of tuber methionine, 369 (abst.).
LARKIN, K. *see* BUSHWAY, R.J.
LAUER, F. *see* ERREBHI, M.
LEACH, S.S. *see* HONEYCUTT, C.W.
LEBECKA, R. *see* ZIMNOCH-GUZOWSKA, E.
LeBLANC, J. *see* COLEMAN, W.K.
LIEW, C.L. *see* DANIELS-LAKE, B.J.
LIEW, C.L. *see* DANIELS-LAKE, B.J.
LILWALL, N. *see* RENIA, H.
LISWIDOWATI, A. *see* DOUCHES, D.S.
LONGTINE, C.A. *see* BAMBERG, J.B.
LORENZEN, J.H. *see* BALBYSHEV, N.F.
LOVE, S.L., A. THOMPSON-JOHNS, and B.K. WERNER. Mutation breeding for improved internal quality and appearance in Russet Burbank, 155.
LOVE, S.L. *see* BOHL, W.H.
LOVE, S. *see* INGLIS, D.
LOVE, S.L. and M.R. HENNINGER. Results of the PAA membership survey concerning Association publications, 369 (abst.).
LOVE, S.L. *see* HERRMAN, T.J.
LOZOYA-SALDANA, H., F. ABELLO J., and G. GARCIA DE LA R. Electrotherapy and shoot tip culture eliminate potato virus X in potatoes, 149.
LULAI, E.C., M.T. GLYNN, and P.H. ORR. Cellular changes and physiological responses to tuber pressure-bruising, 197.
LULAI, E.C. Induction of a tuber resistance response to wilt infections, 369 (abst.).
LULAI, E.C. Refining technique and protocol for skin-set measurement, 370 (abst.).
LYNCH, D.R. *see* KAWCHUK, L.M.
LYNCH, D.R. *see* KAWCHUK, L.M.
LYNCH, D.R. *see* LANGE, F.D.
LYNCH, D.R. *see* FARRIES, B.C.
MACKENZIE, D.R. *see* NIEDERHAUSER, J.S.
MacLEAN, V. *see* PLATT, H.W.
MacLEOD, J.A. *see* SANDERSON, J.B.
MAKUS, L.D. *see* GUENTHNER, J.F.
MALIK, N.J. *see* THORNTON, M.K.
MANZER, F.E. *see* REEVES, A.F.

MARANGONI, A. *see* DUPLESSIS, P.
MARANGONI, A.G. *see* DUPLESSIS, P.M.
MARANGONI, A.G. *see* O'DONOGHUE, E.P.
MARSHALL, K.D. and W.R. STEVENSON. Transmission of *Phytophthora infestans* from infected seed potato tubers to developing sprouts, 370 (abst.).
MARTIN, M. *see* ERREBHI, M.
MARWAHA, R.S. Chipping performance of exotic cultivars stored in evaporatively cooled store and at ambient temperature, 371 (abst.).
MAXWELL, P.W. *see* PETERS, R.D.
McBEATH, J.H. Efficacies of *Trichoderma atroviride* in the control of *Rhizoctonia solani* on potatoes, 371 (abst.).
McDONALD, G.M. *see* FRIEDMAN, M.
McDONALD, J.G. and R.P. SINGH. Host range, symptomology, and serology of isolates of potato virus Y (PVY) that share properties with both the PVY^N and PVY^O strain groups, 309.
McDONALD, J.G. and R.P. SINGH. Response of potato cultivars to North American isolates PVYNTN1, 317.
McGRATH, J.M. *see* HELGESON, J.P.
McKEOWN, A. *see* ALI-KHAN, S.T.
McMILLAN, L.P. *see* MISENER, G.C.
McNABNAY, M. *see* BROWN, C.R.
McNABNAY, M.P. and B.B. DEAN. The effect of potassium deficiency on some factors affecting blackspot bruise susceptibility, 372 (abst.).
McPHEE, J.E., B.M. BEATTIE, R. CORKREY, and J.F.M. FENNELL. Spacing uniformity-yield effects and in-field measurement, 167.
MEDINA, M. *see* PETERS, R.D.
MEDINA, M. *see* PLATT, H.W.
MEHDIZADEGAN, F. and A. REEVES. Does seed generation influence crop productivity?, 372 (abst.).
MELDRUM, J. *see* HAYNES, K.G.
MELDRUM, J. *see* WEINGARTNER, D.P.
MENDOZA, H.A., E.J. MIHOVILOVICH, and F. SAGUMA. Identification of Triplex (YYY), potato Virus Y (PVY) immune progenitors derived from *Solanum tuberosum* ssp. *andigena*, 13
MENDOZA, H.A. and E. MIHOVILOVICH. Identification of triplex (YYŷ) potato virus Y (PVY) immune progenitors derived from *Solanum tuberosum* Ssp. *Andigena*, 372 (abst.).
MEREDITH, P. Effects of picloram (Tordon [R], clopyralid, triclopyr & chlorpyrifos on growth vigor, leaf form, pigmentation, yield, specific gravity, tuber shape, & light sensitivity of potatoes, 373 (abst.).
MIHOVILOVICH, E.J. *see* MENDOZA, H.A.
MIHOVILOVICH, E. *see* MENDOZA, H.A.
MIKITZEL, L.J. *see* OLSEN, N.L.
MILLER, J.S. *see* GEARY, B.
MISENER, G.C., L.P. McMILLAN, and G.C.C. TAI. Two-stage plot harvesting system for potatoes, 337.
MOHAN, S.K. *see* NOLTE, P.
MOLINA-GALAN, J.D. *see* ZUNIGA-LOPEZ, L.N.
MOORE, L. *see* SINGH, M.
MORISHITA, T. *see* COLEMAN, W.K.

MORRA, M.J. *see* EBERLEIN, C.V.
MOSELY, A. *see* INGLIS, D.
MOSLEY, A.R. *see* YILMA, S.
MOSLEY, A.R. *see* ELDREDGE, E.P.
MOZAFARI, J., D.J. WOLYN, and S.T. ALI-KHAN. High frequency of chromosome doubling via tuber disc culture in dihaploid potato: Rapid determination by laser scanning confocal microscopy, 373 (abst.).
MOZAFARI, J., D.J. WOLYN, and S.T. ALI-KHAN. Stability and effectiveness of genetically engineered PLRV resistance in potato cultivars, 374 (abst.).
NEDROW, B., M. WIESE, J. GUENTHNER, A. PAVLISTA, J. WYMAN, and J. SIECZKA. Pesticide use and impact on potatoes in the United States, 374 (abst.).
NIEDERHAUSER, J.S., E. ALVAREZ-LUNA, and D.R. MACKENZIE. RETONA a new strategy in the control of potato late blight, 225.
NIEMIRA, B.A., R. HAMMERSCHMIDT, and G.R. SAFIR. Postharvest suppression of potato dry rot (*Fusarium sambucinum*) in prenuclear minitubers by arbuscular mycorrhizal inoculum, 509.
NOLTE, L.L. *see* JONES, W.B.
NOLTE, L.L. *see* BARRETT, K.B.
NOLTE, P. *see* BARRETT, K.B.
NOLTE, P., M.K. THORNTON, K.K. SHETTY, S.K. MOHAN, R.L. FORSTER, and C.A. STRAUSBAUGH. *Phytophthora infestans* in Idaho in 1995, 375 (abst.).
O'DONOGHUE, E.P., A.G. MARANGONI, and R.Y. YADA. The relationship of chip color with structural parameters of starch, 545.
OJALA, J. *see* JONES, W.B.
OJALA, J. *see* BERTRAM, M.C.
OLSEN, N.L. and L.J. MIKITZEL. Photoperiod effects on plant growth, carbohydrate status and seed vigor, 375 (abst.).
ORR, P.H. *see* LULAI, E.C.
PALTA, J.P. *see* CHEN, Y-K
PALTA, J.P. *see* GUNTER, C.C.
PALTA, J.P. *see* TAWFIK, A.A.
PALTA, J.P. *see* KLEINHENZ, M.D.
PALTA, J.P. *see* VEGA-SEMORILE, S.E.
PALTA, J.P. *see* VEGA, S.E.
PAVEK, J.J. *see* CORSINI, D.
PAVEK, J. *see* INGLIS, D.
PAVLISTA, A.D. How important is common scab in seed potatoes? 275.
PAVLISTA, A. *see* NEDROW, B.
PAZ, M.M. *see* VEILLEUX, R.E.
PEHU, E. *see* ROKKA, V.-M.
PENNER, B. *see* KAWCHUK, L.M.
PERKINS, B. *see* BUSHWAY, R.J.
PETERS, R.D., H.S. (BUD) PLATT, R. HALL, P.W. MAXWELL, M. MEDINA, E. CONNORS, and S. POWELL. Monitoring evolving populations of *Phytophthora infestans* causing late blight of potato in Canada, 376 (abst.).
PETT HADI-PERMADI, W. *see* DOUCHES, D.S.
PIETILA, L. *see* ROKKA, V.-M.
PIETRAK, J. *see* ZIMNOCH-GUZOWSKA, E.
PLATT, H. *see* JOHNSTON, W.
PLATT, H.W. (BUD) *see* PETERS, R.D.

PLATT, H.W. (BUD), R. REDDIN, V. MacLEAN, S. JENKINS, and M. MEDINA. Responses of potato varieties and breeding program lines to late blight caused by "mixed" populations of *Phytophthora infestans*, 376 (abst.).

PLATT, H.W. (BUD), R. REDDIN, V. MacLEAN, and S. JENKINS. Traditional and new fungicides for the control of late blight caused by "mixed" populations of Phytophthora infestans, 377 (abst.).

PORTER, G.A. *see* REEVES, A.F.

PORTER, G., J. SISSON, and B. BRADBURY. Response of four potato varieties to supplemental irrigation in Maine, 377 (abst.).

POTTS, W.J.E. *see* HAYNES, K.G.

POWELL, S. *see* PETERS, R.D.

POWELL, G.E. *see* RENNER, K.A.

POWER, R.J. *see* HAMLEN, R.A.

POWER, R.J. *see* HOWARD, R.J.

POWERS, J.R., T.D. BOYLSTON, K. WELLER, and J. YANG. Natural sprout inhibitors - What do the potatoes taste like?, 378 (abst.).

POWERS, J.R., S.T. SUN, K. WELLER, and T.D. BOYLSTON. Effect of browning inhibitors on texture of prepeeled tubers, 378 (abst.).

PRANGE, R.K. *see* DANIELS-LAKE, B.J.

PRANGE, R.K. *see* DANIELS-LAKE, B.J.

PRICE, T.N. *see* EBERLEIN, C.V.

PRITCHARD, M.K. and L.R. ADAM. CO_2 accumulation and processing quality of Russet Burbank during in-storage sprout inhibition with CIPC, 378 (abst.).

PRITCHARD, M.K. *see* WANG. L.

QUIROS, C.F. *see* FRANKLIN, P.U.

RADCLIFFE, E.B. *see* BAMBERG, J.B.

RAMON, M. and R.E. HANNEMAN, JR. Introgression of resistance to late blight from wild species using embryo rescue and double pollination, 379 (abst.).

RAVICHANDRAN, V. and R.E. VEILLEUX. Application of RAPD markers to study segregation ratios in a monoploid potato family, 379 (abst.).

REDDIN, R. *see* PLATT, H.W.

REEVES, A.F., G.A. PORTER, F.E. MANZER, T.M. WORK, A.A. DAVIS, D.R. HENSEL, and J.R. SHUMAKER. St. Johns: A round white potato variety for fresh market, 89.

REEVES, A. *see* MEHDIZADEGAN, F.

RENIA, H., S. RICHARDSON, N. ARBUCKLE, and A. SKEA. SE growers - The world's best seed growing co-operative, 380 (abst.).

RENIA, H., J. ANDERSON, B. DENT, and N. LILWALL. The EU-15 potato industry, 380 (abst.).

RENNER, K.A. and G.E. POWELL. Weed control in potato with Rimsulfuron, 381 (abst.).

RICHARDSON, S. *see* RENIA, H.

RIVERA-PENA, A. Breeding potatoes for processing products and resistance to late blight, 381 (abst.).

RIVERA-PENA, A. *see* ZUNIGA-LOPEZ, L.N.

RODRIGUEZ, F. *see* HUAMAN, Z.

ROKKA, V.M., L. PIETILA, and E. PEHU. Enhanced production of dihaploid lines via anther culture of tetraploid potato (*Solanum tuberosum* L. ssp. *tuberosum*), 1.

ROSEN, C. *see* ERREBHI, M.

ROWE, R.C. and D. JOHNSON. Strains of *Verticillium dahliae* isolated from potato seed tubers and plants in the Columbia Basin of Washington and Oregon, 382 (abst.).

RUUD, S. *see* BOROVKOV, A.

SABBA, R.P. and B.B. DEAN. Effect of cold storage on proteinase and chorismate mutase activities in *Solanum tuberosum* L. genotypes differing in blackspot susceptibility, 113.
SAFIR, G.R. *see* NIEMIRA, B.A.
SAGUMA, F. *see* MENDOZA, H.A.
SALAS, A. *see* BAMBERG, J.
SALAS, A. *see* del RIO, A.
SANCHEZ, W.K. *see* GUENTHNER, J.F.
SANDERSON, J.B., J.A. Mac LEOD, and R. HENRY. Potato yield response to N as influenced by time of compost application in a barley-clover-potato rotation, 382 (abst.).
SANFORD, L.L., R.S. KOBAYASHI, K.L. DEAHL, and S.L. SINDEN. Segregation of leptines and other glycoalkaloids in *Solanum tuberosum* (4x) X. *S. chacoense* (4x) crosses, 21.
SANFORD, L.L., J.M. DOMAK, W.W. CANTELO, R.S. KOBAYASHI, and S.L. SINDEN. Mortality of potato leafhopper adults on synthetic diets containing seven glycoalkaloids synthesized in the foliage of various *Solanum* species, 79.
SANFORD, L.L. Tuber yields and specific gravities in *Solanum tuberosum* populations selected for resistance to potato leafhopper, 383 (abst.).
SARQUIS, J.I., H. GONZALEZ, and I. BERNAL-LUGO. Response of two potato clones (*S. tuberosum* L.) to contrasting temperature regimes in the field, 285.
SCANLON, M.G. *see* AGBLOR, A.
SCHISLER, D.A. *see* BURKHEAD, K.D.
SCHNEIDER, A.T. *see* DAVIS, J.R.
SCHNEIDER, S. *see* HESS, J.R.
SCHNEIDER, K. and D.S. DOUCHES. The evaluation of simple sequence repeats (SSRs) to fingerprint North American potato cultivars, 383 (abst.).
SCHNEIDER, S.M., R.A. BOYDSTON, S. HAN, and R.G. EVANS. Potential use of site-specific management in potato production systems, 383 (abst.).
SECOR, G. *see* BOROVKOV, A.
SHAFII, B. *see* HERRMAN, T.J.
SHETTY, K. *see* BOWERS, B.
SHETTY, K.K. *see* FRAZIER, M.J.
SHETTY, K.K. *see* HUA, Z.
SHETTY, K.K. *see* NOLTE, P.
SHILLINGFORD, C. *see* HOWARD, R.J.
SHOCK, C.C. *see* ELDREDGE, E.P.
SHUMAKER, J.R. *see* REEVES, A.F.
SIECZKA, J. *see* NEDROW, B.
SILLITO, D. *see* KAWCHUK, L.M.
SINDEN, S.L. *see* SANFORD, L.L.
SINGH, R.P., A. BOUCHER, T.H. SOMERVILLE, and S. COLEMAN. Detection of potato viruses A, M, S, X, Y and leafroll and potato spindle tuber viroid from tissue culture plantlets using single leaf discs, 101.
SINGH, R.P. *see* McDONALD, J.G.
SINGH, M., J.F. DIAMOND, L. MOORE, T-L DeHAAN, and R.P. SINGH. Detection of PVYo in dormant tubers by NASH and RT-PCR and its comparison with plant symptoms and leaf-ELISA, 384 (abst.).
SINGH, R.P. *see* SINGH, M.
SINGH, R.P., J. KURZ, and G. BOITEAU. Detection of potato virus Y and leafroll virus in aphids by duplex RT-PCR, 385 (abst.).
SINGH, R.P. and J. KURZ. RT-PCR anaylsis of PSTVd aphid transmission in association with PLRV, 385 (abst.).

SISSON, J. *see* PORTER, G.
SKEA, A. *see* RENIA, H.
SKIZECZKOWSKA, E. *see* DEAN, B.B.
SLACK, S.A. *see* VALKONEN, J.
SLININGER, P.J. *see* BURKHEAD, K.D.
SOMERVILLE, T.H. *see* SINGH, R.P.
SORENSEN, L.H. *see* DAVIS, J.R.
SOWOKINOS, J.R. Advanced potato breeding selections with cold-chipping and reconditioning potential, 386 (abst.).
SOWOKINOS, J.R., C. THOMAS, and M.M. BURRELL. Allelic polymorphism of UDP-glucose pyrophosphorylase in potato cultivars and its association with tuber resistance to sweetening in the cold, 386 (abst.).
STANKER, L.H. *see* FRIEDMAN, M.
STARK, J. *see* CORSINI, D.
STEVENSON, W.R. *see* HELGESON, J.P.
STEVENSON, W.R. *see* KELLING, K.A.
STEVENSON, W.R. *see* MARSHALL, K.D.
STEWART, J. and J. FELDMAN. Impact of BTT-transgenic potatoes on pest and beneficial arthropods, 387 (abst.).
STIDHAM, M.D. *see* HOWARD, R.J.
STIEBER, T.D. *see* ELDREDGE, E.P.
STRAUSBAUGH, C.A. *see* NOLTE, P.
STUMP, W.L. *see* FRANC, G.D.
SULOIMAN, A-R and S. HAFEZ. Suppression of Columbia root-knot nematode, *Meloidogyne chitwoodi*, race 2 with selected green manure crops, 387 (abst.).
SUN, S.T. *see* POWERS, J.R.
TAI, G.C.C. *see* MISENER, G.C.
TAWFIK, A.A., M.D. KLEINHENZ, and J.P. PALTA. Application of calcium and nitrogen for mitigating heat stress effects on potatoes, 261.
TEPARKUM, S. and R. E. VEILLEUX. The embryonic response of potato anthers to colchicine, 388 (abst.).
THOMAS, J. *see* KAWCHUK, L.M.
THOMAS, C. *see* SOWOKINOS, J.R.
THOMPSON-JOHNS, A. *see* LOVE, S.L.
THORNTON, M.K., N.J. MALIK, and R.B. DWELLE. Relationship between leaf gas exchange characteristics and productivity of potato clones grown at different temperatures, 63.
THORNTON, M. *see* CORSINI, D.
THORNTON, M. *see* HAFEZ, S.L.
THORNTON, M.K. *see* HUA, Z.
THORNTON, R. *see* INGLIS, D.
THORNTON, M.K. *see* NOLTE, P.
TINDALL, T.A. *see* WESTERMANN, D.T.
TOOLEY, P.W., M.M. CARRAS, and J.C. XIA. Application of PCR-based test for detection of potato late blight in tubers, 388 (abst.).
TOPOLEWSKI, M.J. and J.F. GUENTHNER. Advertising on international markets builds "Golden Arches" for U.S. potato industry, 388 (abst.).
TUFFORD, L. *see* VALKONEN, J.
UPADHYA, M.D. Breeding for TPS as future propagule for potato production in Asia, 389 (abst.).
VALKONEN, J., P.T. KAZUO, N. WATANABE, L. TUFFORD, and S.A. SLACK. Resistance to cucumber mosaic virus (CMV) in potato germplasm, 389 (abst.).

VEGA, S. *see* BAMBERG, J.
VEGA, S. *see* del RIO, A.
VEGA, S.E., J.B. BAMBERG, and J.P. PALTA. Potential for improving freezing stress tolerance of wild potato germplasm by supplemental calcium fertilization, 397.
VEGA-SEMORILE, S.E., J.P. PALTA, and J.B. BAMBERG. Evidence for variability in the speed of cold deacclimation among tuber-bearing wild potato species, 390 (abst.).
VEILLEUX, R.E. *see* CHANI, E.
VEILLEUX, R.E. *see* RAVICHANDRAN, V.
VEILLEUX, R.E. *see* TEPARKUM, S.
VEILLEUX, R.E. and M.M. PAZ. Estimation of genetic diversity in potato based on RAPD polymorphism, 390 (abst.).
WAHAB, M.N.J., D.R. WATERER, and T.J. HOGG. Irrigation and seed piece effects on potato seed-tuber yield, 391 (abst.).
WALLIS III, L. *see* WEINGARTNER, D.P.
WALSH, J. *see* DANIELS-LAKE, B.J.
WALSH, J. *see* DANIELS-LAKE, B.J.
WANG, Q. *see* BUSHWAY, R.J.
WANG, L. and M.K. PRITCHARD. Effects of high CO_2/low O_2 and CIPC on processing quality of Russet Burbank potato, 391 (abst.).
WATANABE, N. *see* VALKONEN, J.
WATERER, D.R. *see* WAHAB, M.N.J.
WEINGARTNER, D.P. *see* HAYNES, K.G.
WEINGARTNER, D.P., J. MELDRUM, and L. WALLIS III. Incidence and severity of bacterial wilt, nematode population dynamics, and potato tuber yields, in spring potato crops following five different summer cover crops, 392 (abst.).
WEINGARTNER, D.P., K.G. HAYNES, R.W. GOTH, and J. MELDRUM. Additive and nonadditive gene effects are important in resistance to tuber brown rot, 392 (abst.).
WEISER, G.C. *see* HAFEX, S.L.
WELLER, K. *see* POWERS, J.R.
WERNER, B.K. *see* LOVE, S.L.
WESTEDT, A. *see* DOUCHES, D.S.
WESTERMANN, D.T. and T.A. TINDALL. Potassium relationships in potato plants, 393 (abst.).
WIESE, M. *see* NEDROW, B.
WILSON, J. *see* ALI-KHAN, S.T.
WOLKOWSKI, R. *see* BOWEN, B.
WOLYN, D.J. *see* MOZAFARI, J.
WORK, T.M. *see* REEVES, A.F.
WORK, R.W., A.A. BUSHWAY, and W. HU. Enzymatic browning of four fry-cut and pre-peeled potato varieties, 393 (abst.).
WORK, T.M., A.A. BUSHWAY, and R.W. WORK. Fry processing quality of pre-peeled potatoes, 393 (abst.).
WORK, R.W. *see* WORK, T.M.
WYMAN, J.A. *see* KELLING, K.A.
WYMAN, J. *see* NEDROW, B.
XIA, J.C. *see* TOOLEY, P.W.
YADA, R. *see* DUPLESSIS, P.
YADA, R.Y. *see* DUPLESSIS, P.M.
YADA, R.Y. *see* O'DONOGHUE, E.P.
YANG, J. *see* POWERS, J.R.

YILMA, S., G.M. HUESTIS, and A.R. MOSLEY. Combined use of microsatellite and arbitrary primers in a single PCR reaction to generate polymorphic DNA markers for potato cultivar identification, 394 (abst.).

ZHANG, Y. and J.F. GUENTHNER. Oligopoly power in U.S. frozen potato exports, 394 (abst.).

ZIMNOCH-GUZOWSKA, E., R. LEBECKA, and J. PIETRAK. Selection of diploids resistant to Erwinia Spp. by various screening methods, 354 (abst.).

ZUNIGA-LOPEZ, L.N., A. RIVERA-PENA, and J.D. MOLINA-GALAN. Field resistance to late blight in crosses among potato cultivars (*Solanum tuberosum* L.), 395 (abst.).